

Investigation of Iranian Gardens in Residential Houses and Their Role in Creating Sustainable Architect

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ABSTRACT

Sustainable design is a very important issue in the design world today. Without a doubt, it is one of the most important things that with increasing urbanization and increasing population which human beings are tackled to reach the large problems. Iranian architects had been as artistic pioneers in the field of architectural and urban areas of the country and they had made exquisite elements. If the integrity and sustainability of historic buildings and towns have their own gardens, without doubt Iranian gardens are the most stable and enduring architecture. Iranian garden arose from several thousand years of thinking. It can reduce pollution, and increase the amount of oxygen required for human and it can also absorb noise and cool the environment by reducing energy use and creating a stable system in our cities. Since support and endorsement has made use of features of gardens, it seems that we have made use of the features of this garden in own time and the time has come to invest in the growth and development of urban gardens. Hence, being gardens in sides of street is the best process for consisting with human and nature's needs. We must reorganize the method by optimizing residential area and the back parts of the earth. As a result, in this regards we achieve a sustainable design.

KEY WORDS: Sustainable development, Garden, Housing

1. INTRODUCTION

Increasing urbanization and increasing population and advent of urbanization phenomenon has led to give more attention to development in cities by officials, planners and urban designers to green space. But that should not take away from opinion that the green spaces of time will be able to respond to citizens' demands and needs that urban designers and planners that based on studies, scientific principles and knowledge of the needs, psychological, physical, social and green space to residents of the region to design and build (Rohani, 2012). So, one of the basic concepts of the theory of sustainable development in the context of achieving sustainable cities and urban is green space. Iranian garden arose from several thousand years of thinking and it can be used as a key of improving the sustainability of cities (Akhgar, 2011). Like the Iranian architecture, in Iranian garden, there is nothing unnecessary, what is good and beautiful comes. Iranian garden adorned with discipline and symmetry and have the dignity and privacy, pure and extremes of absurdity bound to efficiency and profitability, contributing to the economy and with contentment and stability. Despite of these qualities, such coordination has good design principles and standards of good points recommended and are achieved the best results. Iranian garden is a response to the need, the need for climate change to individual needs, has the highest performance. This performance mainly helps to improve ecological conditions and reduce population which effectively control over environmental pollution, healthier environment provides for human. A major problem in modern cities is poor air quality. The garden can play the role of an air purifier. Garden also affect the concentration of dust in the atmosphere with particles at atmosphere severely and provide visual necessary in addition to providing clean air trees in orchards by trapping particulate matter through the branches and leaves to reduce pollution.

Changes in wind speed and direction and other vegetation that benefits indirectly reduce energy consumption by reducing air inside buildings are effective. One of the most benefits of applying gardens in houses is shadowing and providing shadow for individuals during year. In addition to the environmental, social, economic, and aesthetic, gardens can be used as an element of the architecture. For example; Annoying light reflection controlling rejection of sound pollution, flood control and storm are included. (Karmania wide green companies, 2012).

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2. Role and importance of Green space in life Urbane

Industrial growth and increasing population growth in cities has led to a utilitarian construction. This construction of health issues and providing minimal light and air is not significant attention in dense urban areas. On the other hand, the need to create new urban land for housing to meet the needs of a growing population, the share of green space and gardens in the city has gradually decreased and thus has caused environmental pollution. It is worth noting that with the destruction of nature, the human resources increased efficiency and it has been replaced by respect for nature. The definition of nature has spread with open space in cities has increased dramatically during this period. What could be raised about the concept of the green space, building densities observed in different parts of the urban area. Encouraging people to plan trees in small space, although the sites of houses, planting trees along streets, open spaces for the development of small parks, green spaces, including the development of effective interventions in improving green space. The historical trend of green space in cities, by necessity, certainly the nineteenth century (with the obvious negative effects of the Industrial Revolution, cities felt the need to try to save the building), considered a turning point. In general, the use of plants in urban areas in the mid-nineteenth century was a direct result of increased urban processing. Unlike in the Twentieth Century Gardens Recreation 18th and 19th centuries, "practical gardens or" green spaces were created. Due to the multitude of urbanization, these gardens are part of the new needs of citizens (Ghanei, 2010).

3. Performance environmental, social, economic, and aesthetic, gardens

Performance environmental, social, economic, and aesthetic, gardens are as follows:

3.1. Performance environmental gardens in houses

Due to the multiple functions of urban green space, green space as part of the cities tissues serve as part of the civil service. One of the basic concepts in the context of achieving sustainable city is green space. Therefore, as previously mentions, all residential areas with increasing their surface area can have garden space and is provided as a complete structure of a sign is to adjust and coordinate the needs of humans and nature, and to act it. It is important to understand that we know that humans built the gardens for the environment with the best process for designing residential spaces. Gardens can also reduce pollution and increase the amount of oxygen required for human and absorb noise and cool the environment by reducing energy consumption and creating a sustainable system in our cities. (Karmania wide green companies, 2012).

3.2. Performance social, economical gardens in houses

Establishment of trees in cities and residential houses meet the needs of the social, cultural and psychological citizens. Trees and plants play vital role in reducing tensions and also improve individual health. It is proved that green space has positive effect on behavior.

Green space and plants and the social impact are effective in the economic effect on the lives of citizens. Plants use the energy efficiency of buildings and green space that is the result of the impact of four ways as follows:

3.2.1 Reduction in sunlight and shadows

3.2.2 Change direction and reduction speed wind

3.2.3 Moderate temperatures through evaporation

3.2.4 Food production and use of wood can also be added to the economic aspects of plants in urban spaces (Karmania wide green companies, 2012).

3.3. Performance aesthetic gardens in residential houses

In the cities, the gardens can be the most worthy phenomena in the human aesthetic sense which is awakened. All human artifacts in the visual communication fail to satisfy the artistic image of human nature leads to spiritual satisfaction. That's why they make the gardens have an important role in improving the quality of urban spaces. For this reason why it is now available frameworks in major cities as artificial and man-made spaces with hard surfaces that the narrow streets and low-latitude cities face heavy traffic due to lack of sufficient green space is taken into ugliness.

The beauty of a city depends on its type design and is in abundant trees. With the rise and development of gardens, houses can increase aesthetic value for a city. (Karmania wide green companies, 2012).

3.4. Performance psychology gardens in residential houses

Crisis of human nature in relation to population density and overcrowding in the current era has lead to creating stressful environments in life. On other hand, the recent findings in the studies of psychology show that environment is classified into two branches. Responding to human needs, including the need for privacy, relaxation, self-evaluation and self-reflection increase mental health individually and collectively. Thus, Iranian garden regards as relationship wisdom humans and God. The encryption secret knowledge about the environment in terms of the exact correlation structure of Iranian garden is possible. Iranian Garden is a conduit to the innermost layer of the ideas and image. It is wisdom image

of Iranian worldview. The structure of Iranian garden shows the close relationship between nature and the human. (Shahcheraghi, 2009).

4. Ways of Creating Sustainable Green Space

4.1 The study of ecologic condition, soil and climatic

4.2 Prevent from planting species that require frequent and more irrigation

4.3 Use species that are beautiful and compatible with environment

4.4 Application and the possible structure of the circumstances surrounding structures are resistant to around.

4.5 Rain water harvesting and runoff method to solve the lack of water to irrigate

4.6 Use species that are beautiful, yet be compatible environment. (Karmania wide green companies, 2012).

5. The elements of shape geometry of Iranian garden can be summarized in the following cases:

5.1. Breadth of vision

There is central axis to the larger Iranian garden that has been drawn. This axe of spine shapes and garden location and its main functional elements are main landscape. Creating a space for contemplation of human exposure and endless space and endless landscapes and the infinite in the finite paid outing, seek happiness, joy and freedom from the shackles of everyday. Through the creation of a central organizing perspective exacerbations and rely on a deep space is at a street stretched to the horizon, the hull of the trees that provide visual depth, extending to the end of the stream, foot garden trees and every other element is to increase the organization perspective. The natural slope of the land suitable for the position provided the high point of the Pavilion is the meaning of paradise. Conversely, when a person looks at the Pavilion, the longer it seems to give more breadth to the garden. Introversion is also one of the principles of architecture, gardens, and follows it as far away from it was surrounded by walls. In addition to the main mansion or palace, there is a building's main entrance which is a place for reception area.

5.2 Water axes

Iranian artist in the garden of his interpretation of the garden regards as a sacred place. He also searching for before gathering all that water is sacred symbols among the more important role has. The most important issues to enliven the garden are to bring water to remote areas where the by digging of wells and aqueducts, this problem has been solved. Subterranean water has located in the canal and regular runnel, and follows with the passage of vessels and main arteries. This method of irrigation has affect on garden design. On other hand, garden design is based on division of gardens and passing water and establishing main and minor axes of mechanism. (Shemale and of Iranian students, 2011).

5.3 Rectangular geometry

Due to the geometric shapes and creating squares shapes for showing components/elements of gardens and specifying precise location of planting tress is seen as a raw of trees on each side that has a special importance. Human intervention in nature to the Iranian Garden art imposes specific geometry, the origin is not known, the structure of the environment. In fact; wherever possible, the Iranian garden was a rectangle of land was allocated. (Shemale and of Iranian students, 2011).

5.4 Symmetry

Principle symmetry/balance is the most perfect shape of balance. This principle is widely used in the Iranian garden. The palace which built was symmetrical, located on the axis or center of symmetry. Symmetrical peak can be seen in the main building. In the main axis, even the trees, shrubs and flowers planted in the mirror. Depending on the placement of the rectangular garden pavilion, a two-axis and four-axis are almost square plan. (Shemale and of Iranian students, 2011).

5.5 Centrality

The centrality principle can be seen in the palace. Particularly, palaces with eight designs paradise pavilion principles are square in plan at its peak is centered at the intersection of pavilion. (Shemale and of Iranian students, 2011).

6. Crisis shortage of Water

Iran has encountered with problem of water shortages as a state located in the dry belt of the earth. Creating gardens and water resource constraints faces the country in a very serious way. But drought is a natural phenomenon as well as other natural phenomena through science, knowledge, planning and management is controlled and predictable and its consequences can also be minimized. Water crisis and water restrictions are a serious problem for many countries and for all countries in the world in the future that it should be considered. This limitation growth and

excellence of the garden can be affected. Hence, we should follow manage water for periods of drought, not water management during drought. Unfortunately, so far we've done cross-sectional.

Drought as a natural disaster is the most silent. Drought is a normal state and ongoing climate, while many believe it is a random event on mistake. This phenomenon occurs in all climatic zones. But it's characteristic of a region to another region is completely different. The study, research, and how to deal with it has received little attention. Drought is subtle, but natural disasters. Although numerous definitions presented for this phenomenon, the deficiency of precipitation over an extended period of time usually a season or more. Also, high temperatures, strong winds and low relative humidity in many parts of the world with this phenomenon and how it can add considerably. (Mzjat, 2012).

6.1 The following is instrumental to solve water crisis

- 6.1.1 Administration regulations establish how the water
- 6.1.2 Conservation and recycling programs for used parts
- 6.1.3 Public awareness and participation in the planning and management of water
- 6.1.4 Attention to demands in all recycles of water
- 6.1.5 Accurate attention to management of water
- 6.1.6 Estimating economical value of water in each one of water zones
- 6.1.7 Attention to executive programs management drought
- 6.1.8 using of new methods of watering.
- 6.1.9 Promotion level of culture of people and society
- 6.1.10 Utilizing experiencing success countries
- 6.1.11 Construction new dams
- 6.1.12 Investigating fragmentation of networks
- 6.1.13 Projects such as drilling wells, transporting water from other areas
- 6.1.14 Control over stored behind Dams
- 6.1.15 Temporary pumps and wells
- 6.1.16 Change the pattern of cultivation by farmers
- 6.1.17 Fight weeds, watering during the cool, dry soil resistance fertilizer use, increasing the resistance of trees, and the isolation level till the green woods and hunger
- 6.1.18 Applying the scientific way of thinking in order to prevent water shortage (Khzayl, 2012).

Therefore, the water crisis managers should not have a view point and instantaneous about dehydration. It should be based on emergency response and developing a long term plan to prepare regular and to prevent the spread of the crisis. In this way not only the authorities but also all executive agencies and administrative enforcement management strategies and mitigate the effects of drought and low water requirements. In the face with the water crisis, we should turn threats into an opportunity and we know it's worth something revolutionary. It is not only an organization but all people are required to solve this problem. We are encountered with equation with two unknowns in this success. One refers to water shortage which we should think against the scientific solution, second refers to potential threat how we make an opportunity. We crossed over dehydration which is calm and rational, that is, with prudence, challenges, hard work and good management, with the lowest losses crossed. It is difficult to recognize should be warned against the

Then, we should aware people of difficulties and saving water, and we should also aware people of starting saving water from ourselves and know our society is same our problems and family. We should familiarize our children with the proper use of water from childhood. Since water is only blessing that it does not replace and the absence of accumulated water is a luxury that only a life of human beings and all beings in the world is denied. (Khzayl, 2012).

6.2 Suggestions for further reading

- 6.2.1 Support from conducted research on drought
- 6.2.2 Establishing underground dams
- 6.2.3 Removing water from other urban uses
- 6.2.4 Prevent destruction from vegetation cover
- 6.2.5 Promote water conservation, especially among housewives
- 6.2.6 Familiarizing people with the related instruments for drought and encourage them to save
- 6.2.7 Continuous monitoring of resource usage
- 6.2.8 Control population growth
- 6.2.9 Improvement networks of urban water
- 6.2.10 Network optimization using the traditional method of irrigation or irrigation (Khzayl, 2012).

7. Ways of providing land for gardens in residential houses

Implementing gardens in the houses are facing with horizontal growth of the city and this requires the use of large lands in cities to implement gardens in residential houses. As a result of the implementation of the modified privacy

gardens in residential houses cause to change city limits of cities and we should joint the land outside of the city and the government can do whatever into territory of cities. That is, it is likely to provide required lands for gardens. Since our reserves lands are outside of the city too much, therefore; it should increase with government act. It is necessary to note that we should put land outside of the city limits in the natural resources at the disposal of the Ministry of Roads and Urban Development. (Jame Jam newspaper online, On-line news magazine).

8. CONCLUSION

In the condition which in major cities, all priorities and natural structures are victim of traffic and urban constructions and also disruption of the earth's warm and thinning of the ozone layer caused by the use of a variety of pollutants and increase contamination of the environment and endangered species all together to outpace by the use of gray-green world, the most important aspects of the present century is considered. In this world, the architects are also consistent with other stakeholders in order to provide new ways of offering the human good life. Because life, work, recreation, relaxation, and, all activities are done in spaces designed by architects. Since the strengths and weaknesses points of a residential building will have a direct impact on the environment, the task of the architect is very sensitive about it. Thus, these architects can create the best gardens in residential houses to consistent with the needs of man and nature to achieve this. As a result, architects should value and appreciate horizontal growth of residential housing and cities and see the gardens around the houses. It causes to reduce the population density, traffic, noise and much anymore, and leads us towards sustainable energy and architecture.

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